

K073468

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**510(K) SUMMARY OF SAFETY AND EFFECTIVENESS**

**MIMICS (Materialise's Interactive Medical Image Control System)**

**PROPRIETARY NAME:**

**Mimics**

APR - 2 2008

**COMMON NAME:**

Image processing system and preoperative software for simulating /evaluating surgical treatment options

**CLASSIFICATION NAME:**

System, Image Processing. This product uses images acquired from Computerized Tomography (CT) or Magnetic Resonance Imaging (MRI) scanners.

**DEVICE CLASSIFICATION:**

This device has been classified as Class II.

**REGULATORY CLASS:**

Class II

**PRODUCT CODE:**

LLZ

**SUBMITTER'S NAME AND ADDRESS:**

MATERIALISE N.V.  
Technologielaan 15  
B-3001 LEUVEN, BELGIUM

**ESTABLISHMENT REGISTRATION NO:**

3003998208

**CONTACT PERSON:**

Mieke Janssen, Materialise N.V.  
Quality Engineer

**SUMMARY PREPARATION DATE:** April 1, 2008

**PREDICATE DEVICE**

The **Mimics** software is claimed to be substantially equivalent in material, design, and function to the SimPlant product from Materialise Dental which was cleared by FDA under 510(k) K033849 on May 25, 2004.

**DEVICE DESCRIPTION**

The Materialise **Mimics** software is intended for use as a software interface and image segmentation system for the transfer of imaging information from a medical scanner such as a CT scanner or a Magnetic Resonance Imaging scanner to an output file. It is also intended as pre-operative software for simulating / evaluating

surgical treatment options. Mimics is not intended to be used for mammography imaging.

#### STERILIZATION

The **Mimics** product is provided non-sterile.

#### INDICATIONS FOR USE

The Materialise **Mimics** software is intended for use as a software interface and image segmentation system for the transfer of imaging information from a medical scanner such as a CT scanner or a Magnetic Resonance Imaging scanner to an output file. It is also intended as pre-operative software for simulating / evaluating surgical treatment options. Mimics is not intended to be used for mammography imaging.

#### SUBSTANTIAL EQUIVALENCE

**Mimics** is considered to be substantially equivalent to the SimPlant System.

#### CONCLUSION

**Mimics** is considered to be substantially equivalent in design, material and function to the SimPlant system.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
9200 Corporate Blvd.  
Rockville MD 20850

APR - 2 2008

Mr. Mieke Janssen  
Quality Engineer  
Materialise NV  
Technologielaan 15  
3001 Leuven  
BELGIUM

Re: K073468

Trade/Device Name: Mimic Software  
Regulation Number: 21 CFR 892.2050  
Regulation Name: Picture archiving and communications system  
Regulatory Class: II  
Product Code: LLZ  
Dated: March 20, 2008  
Received: March 24, 2008

Dear Mr. Janssen:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.



*Protecting and Promoting Public Health*

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter.

21 CFR 876.xxxx	(Gastroenterology/Renal/Urology)	240-276-0115
21 CFR 884.xxxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 892.xxxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at 240-276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at 240-276-3464. You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K073468

Device Name: Mimics

Indications For Use:

Mimics is intended for use as a software interface and image segmentation system for the transfer of imaging information from a medical scanner such as a CT scanner or a Magnetic Resonance Imaging scanner to an output file. It is also used as pre-operative software for simulating /evaluating surgical treatment options.  
Mimics is not intended to be used for mammography imaging.



Prescription Use X  
(Part 21 CFR 801 Subpart D)

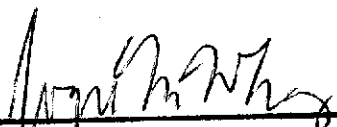
AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of Reproductive, Abdominal,  
and Radiological Devices  
510(k) Number K073468

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